REMARKS

Claims 1-8, 10-17, 19-34, and 38-42, and 45-46 are pending in the present application. Claims 9, 18, 25-37, 43, 44, and 47-50 have been cancelled without prejudice or disclaimer to the subject matter contained therein.

A. Rejection of Claims 1, 2, and 7 as being anticipated by Hamada et al.

Claims 1, 2, and 7 have been rejected under 35 U.S.C. §102(b) as being anticipated by Hamada et al. (US-A-6,373,291). This rejection under 35 U.S.C. §102(b) is respectfully traversed.

As respectfully submitted above, independent claim 1 sets forth a switch comprising a plurality of field effect transistors connected in series, each field effect transistor including a gate, a source, and a drain, each gate having a gate width and a gate length. The gate length of one of the series connected field effect transistors is a different size from the gate length of another series connected field effect transistor.

In formulating the rejection under 35 U.S.C. §102(b), the Examiner alleges that Hamada et al. teaches, at column 8, lines 9-14, that the field effect transistors of a switch include a gate, a source, and a drain wherein the gate length of one of the series connected field effect transistors is a different size from the gate length of another series connected field effect transistor. This position by the Examiner is respectfully traversed.

Hamada et al. teaches, at column 8, lines 9-14, a relationship, $((W_{PMO}/L_{PMO})>2(((W_{NMO}/L_{NMO}))$, between the gate width/length ratio of a first transistor and the gate width/length ratio of a second transistor. Moreover, Hamada et al. teaches that the gate widths are not equal. Hamada et al. is silent as to the actual relationship between the gate lengths. Given that Hamada et al. is silent as to the actual relationship between the gate lengths, it is improper to conclude, from the disclosed relationship between the gate width/length ratio of a first transistor and the gate width/length ratio of a second transistor, that the gate lengths must also not be equal because the disclosed relationship is equally true if the gates lengths are equal. In other, the Examiner's assertion of anticipation is not based upon what Hamada et al. actually teaches because Hamada et al. is void of any disclosure that directly or explicitly teaches that the

gate length of one of the series connected field effect transistors is a different size from the gate length of another series connected field effect transistor.

In summary, Hamada et al. only teaches that the gates' widths are of different sizes and teaches a relationship between the gate width/length ratio of a first transistor and the gate width/length ratio of a second transistor. Therefore, since Hamada et al. only teaches that the gates' widths are of different sizes, Hamada et al. fails to anticipate a gate length of one of the series connected field effect transistors being a different size from the gate length of another series connected field effect transistor, as set forth by the independent claim 1.

With respect to dependent claims 2 and 7, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claim 1. The Applicants reserve the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the present rejection.

B. Rejection of Claims 8, 9, and 14-16 as being anticipated by Sun

Claims 8, 9, and 14-16 have been rejected under 35 U.S.C. §102(b) as being anticipated by Sun (US-A-4,890,077). This rejection under 35 U.S.C. §102(b) is respectfully traversed.

As respectfully submitted above, amended independent claim 8 sets forth a switch comprising a plurality of dual-gate field effect transistors connected in series, each dual-gate field effect transistor including two gates, a source, and a drain. One of the series connected dual-gate field effect transistors has a modified gate therein that has a gate length of a different size from gate lengths of other series connected dual-gate field effect transistors.

In formulating the rejection under 35 U.S.C. §102(b), the Examiner alleges that Sun teaches that the field effect transistors of a switch include a gate, a source, and a drain wherein the gate width of one of the series connected field effect transistors is a different size from the gate width of another series connected field effect transistor. This position by the Examiner is respectfully traversed, in view of the amendments set forth above.

As noted by the Examiner, Sun teaches that the field effect transistors of a switch include a gate, a source, and a drain wherein the gate width of one of the series connected field effect transistors is a different size from the gate width of another series connected field effect transistor. However, amended independent claim 8 sets forth that one of the series connected dual-gate field effect transistors has a modified gate therein that has a gate length of a different size from gate lengths of other series connected dual-gate field effect transistor. Sun fails to anticipate one of the series connected dual-gate field effect transistors has a modified gate therein that has a gate length of a different size from gate lengths of other series connected dual-gate field effect transistor, as set forth by the amended independent claim 8.

With respect to dependent claims 9 and 14-16, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claim 8. The Applicants reserve the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the present rejection.

C. Rejections of Claims 3-6 and 10-13 as being Obvious under 35 U.S.C. §103

With respect to dependent claims 3-6 and 10-13, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claims 1 and 8. The Applicants reserve the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the amendments and the reasons set forth above, the Examiner is respectfully requested to reconsider and withdraw the various rejections.

D. Rejection of Claims 22-33 as being unpatentable over Kameyama et al. & Sun

Claims 22-33 have been rejected under 35 U.S.C. §103 as being unpatentable over Kameyama et al. (US-A-5,748,053) in view of Sun (US-A-4,890,077). This rejection under 35 U.S.C. §103 is respectfully traversed.

As respectfully submitted above, amended independent claim 22 sets forth a radio frequency single pole double throw switch, comprising a receiver port; a transmitter port; an antenna port; a receiver section connecting the receiver port to the antenna; and a transmitter section connecting the transmitter port to the antenna. The receiver section includes a plurality of dual-gate field effect transistors connected in series, each dual-gate field effect transistor including two gates, a source, and a drain such that one of the series connected dual-gate field effect transistors has a modified gate therein, the modified gate having a length that is of a different size from gate lengths of other series connected dual-gate field effect transistors.

In formulating the rejection under 35 U.S.C. §103, the Examiner recognizes that Kameyama et al. fails to teach the modified gates. To meet this deficiency, the Examiner alleges that Sun teaches a gate width of one of a series connected field effect transistors being a different size from a gate width of another series connected field effect transistor. From this allegation, the Examiner concludes that the claimed invention of independent claim 22 would be obvious to one of ordinary skill in the art. These positions by the Examiner are respectfully traversed, in view of the amendments set forth above.

As noted by the Examiner, Kameyama et al. fails to teach the modified gates. Moreover, as noted by the Examiner, Sun teaches that the field effect transistors of a switch include a gate, a source, and a drain wherein the gate width of one of the series connected field effect transistors is a different size from the gate width of another series connected field effect transistor. However, amended independent claim 22 sets forth that one of the series connected dual-gate field effect transistors has a modified gate therein, the modified gate having a length that is of a different size from gate lengths of other series connected dual-gate field effect transistors. Sun fails to anticipate one of the series connected dual-gate field effect transistors has a modified gate therein, the modified gate having a length that is of a different size from gate lengths of other series connected dual-gate field effect transistors, as set forth by the amended independent claim 22.

Therefore, Kameyama et al. and Sun, singly or in combination, fail to teach or suggest one of the series connected dual-gate field effect transistors has a modified gate therein, the modified gate having a length that is of a different size from gate lengths of other series connected dual-gate field effect transistors, as set forth by the amended independent claim 22.

With respect to dependent claims 23-33, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claim 22. The Applicants reserve the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the present rejection.

E. Rejection of Claims 35-42 over Kameyama et al. in view of Sun & Tanaka et al.

Claims 35-42 have been rejected under 35 U.S.C. §103 as being unpatentable over Kameyama et al. (US-A-5,748,053) in view of Sun (US-A-4,890,077) and Tanaka et al. (US-A-5,514,992). This rejection under 35 U.S.C. §103 is respectfully traversed.

As respectfully submitted above, allowable dependent claim 39 has been rewritten in independent form. Therefore, now amended independent claim 39 is allowable over the combined teachings of Kameyama et al. in view of Sun and Tanaka et al.

With respect to dependent claims 38 and 40-42, the Applicants, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claim 39. The Applicants reserve the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the present rejection.

CONCLUSION

Accordingly, in view of the amendments and remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw all the present rejections. Also, an early indication of allowability is earnestly solicited.

Respectfully submitted,

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